# CITY OF SAN ANTONIO

P.O. BOX 839966 SAN ANTONIO, TEXAS 78283-3966

# OCCUPANCY CLASSIFICATION INSTRUCTIONS

# for Warehousing, Manufacturing, and Hazardous Materials

The purpose of these instructions is to assist applicants and plan examiners in the review of construction documents submitted for building permits. All references are to the 2003 International Fire Code (IFC) unless otherwise noted. Complete the responses in duplicate by a qualified individual, prepared ON COMPANY LETTERHEAD, SIGNED, DATED, and submitted with the construction documents to:

Development Services Department 1901 S. Alamo St (210) 207-8394 Fax (210) 207-6377

Use the following format (see sample on page 4):

#### **Division I -- General**

Indicate the name of facility, address, plan number (if known), contact person(s), and phone number(s) for specific divisions noted below if necessary. If a Division is not applicable, indicate NA under the Division heading.

# **Division II -- Warehousing and Storage**

#### Part I -- General

- 1. Submit a floor plan of the building showing locations and dimensions of storage areas.
- 2. Identify all commodities being stored (See IFC Section 2303) and identify their location on floor plan in number 1 above. If there are any hazardous materials, the applicant shall complete Division IV also.

- 3. Identify the total quantity and storage height of each commodity identified in number 2 above. Complete Division II Part II when the storage height is greater than 12 feet above finished floor for Class I through IV Commodities, or greater than 6 feet above finished floor for High Hazard Commodities or Class A Plastics. (See IFC Section 2303)
- 4. Identify and describe the storage method for each commodity in number 2 above (i.e., solid pile, shelf storage, mobile, bin box, or racks that are single, double, or multi-row).
- 5. If using rack storage, identify if palletized or solid shelving. Solid shelving is that which are solid, slatted, mesh, or grated located within racks that obstruct sprinkler water penetration through the racks (See IFC Section 2302).

### Part II -- High Piled Storage (IFC Section 2302)

- 1. If using separation of high piled storage areas per IFC Sections 2306.3, indicate on the floor plan in number 1 in Division II Part I above.
- 2. Identify the floor to ceiling height for each storage area.
- 3. Identify the commodity clearance between the top of storage and the sprinkler deflector for each storage area.
- 4. Identify aisle dimensions between each storage array (See IFC Section 2306.9).
- 5. If using rack storage, submit a dimensioned plan view and elevation plan of the rack system to include: location of tiers and location and dimensions of transverse and longitudinal flue spaces (See IFC Section 2308).
- 6. Identify the type of fire suppression and fire detection systems. Include the fire suppression system's design criteria for each area with references to applicable codes and standards that show that the proposed/existing system is adequate to protect the proposed storage.
- 7. Identify the location of required fire department access doors. (See IFC Section 2306.6)
- 8. Identify the type, location, and provide the manufacturer's specifications for any smoke removal systems. (See IFC Section 2306.7)
- 9. Identify the location and provide a section view of curtain boards. (See IFC Section 2306.7)

# **Division III -- Manufacturing and Process**

Provide a detailed description of any manufacturing or processes that are being conducted within the building or additions (i.e., assembly, conveyor lines, woodworking, spray booths, etc.). This applies to manufacturing or processes that are new, being expanded, modified, or are existing in the building. Submittal of cut sheets or manufacturer's specifications of equipment may be required. Additional floor plans showing flow of process may be necessary for clarification. If using any hazardous materials identified in Division IV below, clarify whether they are used in a closed or open system (See IFC Section 202).

#### **Division IV -- Hazardous Materials**

# Part I -- General

If any hazardous materials identified in Division IV Part II are stored, handled, or used in the building or lease space, prepare a Hazardous Material Inventory Statement as detailed in Division IV Part III. (See IFC Section 2701.5.2). Reference 2003 International Building Code Section 307 and IFC Chapters 27 through 44 unless otherwise noted in Part II.

Part II -- Hazardous Materials

Combustible liquid (Class II, IIIA, IIIB)	Pyrophoric Materials
Combustible fiber	Unstable reactive (Class 1-4)
Cryogenic fluids	Water reactive (Class 1-3)
Explosives	Corrosives
Flammable solid	Toxics and highly toxics
Flammable gas	Aerosols
Flammable liquid (Class IA, IB, IC)	Compressed gasses
Organic peroxide (Class I-V)	Other
Oxidizer (Class 1-4)	

#### Part III – Hazardous Materials Inventory Statement

For each hazardous material, identify:

- 1. The common or trade name for each material stored or used.
- 2. The hazard class for each material stored or used will be one of the classes identified in Part II above. NOTE: If the hazard class has sub-classifications, it is very important to identify the sub-classification (i.e., the hazard class would be Combustible Liquid Class IIIA, **not just** Combustible Liquid).
- 3. The chemical name, major constituents and concentrations of a mixture.
- 4. The Chemical Abstract Service (CAS number) found in 29 Code of Federal Regulations (CFR)
- 5. Whether the material is pure or a mixture, and whether the material is a solid, liquid or gas.
- 6. Whether the material is stored or used. If used, identify if it is in a closed or open use system (See IFC Section 202)
- 7. Maximum aggregate quantity in storage and in use at any one time.
- 8. Storage conditions to the storage type, temperature and pressure.

NOTE: Material Safety Data Sheets (MSDS) are not a substitute for the above.

#### **Conclusion**

One copy of all approved material will be kept with the City and one copy returned to the owner. After permitting, any changes to the warehousing/storage configuration, type of commodities stored or used, or to the manufacturing/process, must be submitted to the City for review and approved prior to implementing the change.

# Sample Letter Head Company, Inc. 1234 Someplace St. San Antonio, Texas 78000

#### **Division I -- General**

Name of facility: Sample Letter Head Company Warehouse and Manufacturing Center

Address: 5678 Somewhere Else St. San Antonio, Texas 78111

Contact Person: John Q. Citizen 210 222-2222

#### **Division II -- Warehousing and Storage**

#### Part I General

See attached floor plan for location of and dimensions of storage areas.

Commodity	Quantity	Storage Height	Storage Method	Hazard Class
food in cardboard	1200-1500 boxes	22 ft	double row racks pallets	Class II
boxes				
rubber tires	1500 tires	10 ft	single row racks	High Hazard
polystyrene widget	1000- 1 lb. Widgets	4 ft	solid pile	Class A plastic
ethyl bromoacetate	48 - 5 gal metal	5 ft	rack - solid shelving and used	see Division IV
	containers		in process	

#### Part II-- High Piled Storage

See attached floor plan for storage areas, aisle dimensions, rack storage plans, access doors, locations and description of smoke removal (vents), and locations and section of curtain boards.

Floor/Ceiling	Commodity Clearance	Fire Protection
<u>Height</u>		
25 ft	cardboard - 3 ft, tires - 15 ft, widgets - 21 ft, ethyl - 20 ft	Entire bldg. is protected with sprinkler system with following design criteria:  • Tire Storage Area: gpm / sq.ft. per 2002 NFPA 13 Section(s) and Table(s)  • Other areas: gpm / sq.ft. per 2002 NFPA 13 Section(s) and Table(s)  Smoke and heat vents provided at a ratio of per 2003 IFC Section 2306.7 and Table 910.3.  Curtain boards throughout warehouse per Section 2306.7 ft. depth with maximum area form by draft curtains at sq.ft.  Small hose stations per 2003 IFC Section 2306.8
		Small hose stations per 2005 if e Section 2500.0

#### **Division III -- Manufacturing and Process**

Manufacturing uses an open and closed system with ethyl bromoacetate. See attached floor plan showing process line.

#### **Division IV -- Hazardous Materials**

Common	Hazard Class	Chemical	CAS No.	Physical	Stored or	Max.	Storage
Name		<u>Name</u>		<u>State</u>	<u>Used</u>	Quantity	Conditions
ethyl	Corrosive,	ethyl	105-36-2	Liquid	Stored in 48-	stored-240	stored and

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ester	Combustible Liquid Class II, Toxic, and	bromoacetate		5 gal metal containers, closed use	gal, closed use - 100 gal,	used under normal pressure and
	Other Health			and open use	open use-50	temp.
	Hazard				gal	

The maximum quantities expected for storage, closed use, and of	pen use do not exceed the exempt amounts identified i	.11
2003 IFC IBC Sections UBC Tables 3D and 3E in a sprinklered	building for corrosives, combustible liquids class II, to	oxic,
or other health hazards. Note: please see the attached MSDS sho	eets for reference.	
Signature	Date	

John Q. Citizen Regional Manager Sample Letter Head Company, Inc.

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